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Examiner: Habte Mered

REMARKS

Claims 1 through 18 remain in this application. Claims 1 and 13 are amended to more broadly claim the invention and to clarify the language used in the claims.

Claim Rejections under 35 U.S.C. 103(a)

The Examiner rejected claims 1, 3-7, 9-13 and 15-18 under 35 U.S.C. 103 as being unpatentable over U.S. Patent No. 6,654,341 to Chi et al. (the Chi reference) in view of U.S. Patent No. 6,616,350 to de Boer et al. (the De Boer reference). However, neither the Chi reference nor the de Boer reference, either alone or in combination, teach or suggest the requirements of the claims.

Independent Claim 1 and dependent claims 2 through 6

Independent Claim 1 states, "responsive to an indicated span switch on a first ring, wherein the span switch is not between the first and second network elements, passing control information for said first ring over said shared protection channel while indicating availability of the shared protection channel to other rings; and responsive to an indication that the shared protection channel is needed to pass communications traffic for a second ring, ceasing to pass the control information for said first ring over said shared protection channel and indicating the non-availability of the shared protection channel to rings other than said second ring." As explained at paragraphs 38 and 39 with respect to Figures 6a and 6b, when a span switch has occurred on a Ring (such as Ring3 in Figure 6a), the shared protection channel 22ab is coupled between the protection channels of Ring3 to pass control information for Ring3. However NR signals are still output to the other rings Ring1 and Ring2 to indicate that if necessary (e.g. due to a ring switch or other failure), the shared protection channel is still available to pass communications traffic.

First, the Chi reference fails to teach the requirement of, "responsive to an indicated span switch on a first ring, wherein the span switch is not between the first and second network elements, passing control information for said first ring over said shared protection channel while indicating availability of the shared protection channel to other rings." The Chi reference only

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describes that traffic is rerouted over the shared protection channel during a ring switch at column 6, lines 14 through 18. It specifically states that the traffic is rerouted through switches 1210 and 1240 and a K-byte ring switch signal is supplied to the switches. Thus, it only discloses a ring switch and thus necessarily does not disclose that control information is passed over the shared protection channel during a span switch. Furthermore, it does not disclose indicating availability of the shared protection channel to other rings when control information is being passed over the shared protection channel in response to a span switch. In fact, the Chi reference teaches away from this type of prioritization by stating a first come, first serve basis at column 5, line 65 through column 6, line 1.

The Office Action states on Page 3, second paragraph that, "Chi discloses that the shared protection line for a multi-ring system carry K-byte information (i.e. control information). See Column 5, Lines 31-33." The Office Action then makes some conclusions that, "Given these disclosures, prior to a span switch request the protection line is a medium for transmitting control information of the multi-ring system of which ring 1 is one of the rings transmitting control information. When a span switch request on a first ring occurs, then only the control and traffic information of ring 1 will pass through the protection line after the span switch occurs."

If as the Office Action states that the Chi reference teaches that prior to a span switch request the protection line is a medium for transmitting control information, then this situation is not as required by claim 1. Claim 1 states that control information is passed over the shared protection channel responsive to an indicated span switch on a first ring, wherein the span switch is not between the first and second network elements. Furthermore, if both the control and traffic information of ring 1 is passing through the protection line, then the span switch occurred between the shared network elements on the shared protection line. This type of span switch is also not the situation described by claim 1 when it states that control information is passed over the shared protection channel responsive to an indicated span switch on a first ring, wherein the span switch is not between the first and second network elements. In claim 1, a span switch occurs elsewhere on the ring and only the control information is passed over the shared protection line. The Chi reference nowhere discloses what happens when a span switch occurs elsewhere on the ring.

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Second, the Chi reference fails to teach the requirement of, "responsive to an indication that the shared protection channel is needed to pass communications traffic for a second ring, ceasing to pass the control information for said first ring over said shared protection channel and indicating the non-availability of the shared protection channel to rings other than said second ring." As indicated above, the Chi reference does not pass control information for said first ring over said shared protection channel during a span switch.

The de Boer reference fails to add to the teaching of claim 1. The de Boer reference nowhere even discloses a shared protection span or how to control signaling over a shared protection span. Thus, it can not add to the teaching of the Chi reference to disclose or suggest the requirement of claim 1, *inter alia*, of: "responsive to an indicated span switch on a first ring, wherein the span switch is not between the first and second network elements, passing control information for said first ring over said shared protection channel while indicating availability of the shared protection channel to other rings."

Independent Claim 7 and dependent claims 8 through 12

The Chi reference fails to disclose, *inter alia*, the requirement of, "passing control information for a first ring over said shared protection channel while indicating availability of the shared protection channel to rings other than said first ring, responsive to an indicated span switch on a first ring." The Chi reference only describes that traffic is rerouted over the shared protection channel during a ring switch at column 6, lines 14 through 18. It specifically states that the traffic is rerouted through switches 1210 and 1240. Thus, it does not disclose that control information is passed over the shared protection channel during a span switch. Furthermore, it does not disclose indicating availability of the shared protection channel to other rings when control information is being passed over the shared protection channel. In fact, the Chi reference teaches away from this type of prioritization by stating a first come, first serve basis at column 5, line 65 through column 6, line 1.

The de Boer reference fails to add to the teaching of claim 7. The de Boer reference nowhere even discloses a shared protection span or how to control signaling over a shared protection span. Thus, it can not add to the teaching of the Chi reference to disclose or suggest

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the requirement of claim 7, *inter alia*, of: "passing control information for a first ring over said shared protection channel while indicating availability of the shared protection channel to rings other than said first ring, responsive to an indicated span switch on a first ring."

Independent Claim 13 and dependent claims 14 through 18

The Chi reference fails to disclose the requirement in claim 13, *inter alia*, of, "circuitry for passing control information for a first ring over said shared protection channel while indicating availability of the shared protection channel to other rings, responsive to an indicated span switch on a first ring." The Chi reference only describes that traffic is rerouted over the shared protection channel during a ring switch at column 6, lines 14 through 18. It specifically states that the traffic is rerouted through switches 1210 and 1240. Thus, it does not disclose that control information is passed over the shared protection channel during a span switch. Furthermore, it does not disclose indicating availability of the shared protection channel to other rings when control information is being passed over the shared protection channel. In fact, the Chi reference teaches away from this type of prioritization by stating a first come, first serve basis at column 5, line 65 through column 6, line 1.

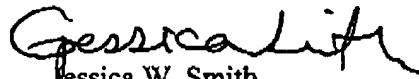
The de Boer reference fails to add to the teaching of claim 13. The de Boer reference nowhere even discloses a shared protection span or how to control signaling over a shared protection span. Thus, it can not add to the teaching of the Chi reference to disclose or suggest the requirement of claim 13, *inter alia*, of: "circuitry for passing control information for a first ring over said shared protection channel while indicating availability of the shared protection channel to other rings, responsive to an indicated span switch on a first ring."

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For the above reasons, the foregoing amendment places the Application in condition for allowance. Therefore, it is respectfully requested that the rejection of the claims be withdrawn and full allowance granted. Should the Examiner have any further comments or suggestions, please contact Jessica Smith at (972) 477-9109.

Respectfully submitted,

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